TENNESSEE AIR POLLUTION CONTROL BOARD DEPARTMENT OF ENVIRONMENT AND CONSERVATION NASHVILLE, TENNESSEE 37243-1531



OPERATING PERMIT (Conditional Major) Issued Pursuant to Tennessee Air Quality Act

Date Issued: Permit Number:

Date Expires: August 1, 2014

Issued To:

Vulcan Construction Materials, L.P.

Installation Description:

02: 500 ton/hour Drum Mix Asphalt Plant with Baghouse Control.

03: One (1195 hp) Internal

Combustion Diesel Generator.

Emission Source Reference No.

58-0073

NSPS (Asphalt)

Installation Address: 802 19th Street

South Pittsburg

The holder of this permit shall comply with the conditions contained in this permit as well as all applicable provisions of the Tennessee Air Pollution Control Regulations.

CONDITIONS:

The application that was utilized in the preparation of this permit is dated January 1. 15, 2004 and is signed by R. K. Watt, Engineer for the permitted facility. If this person terminates employment or is reassigned different duties and is no longer the responsible person to represent and bind the facility in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification shall be in writing and submitted within thirty (30) days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the facility in environmental permitting affairs. representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the facility until such time that a revision to this permit is obtained that would change said representations, agreements and covenants. This permit does not cover any air contaminant source that does not conform to the conditions of this permit and the information given in the approved application.

(conditions continued on next page)

TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

NON-TRANSFERABLE

POST AT INSTALLATION ADDRESS

CN-0827 (Rev. 9-92)

RDA-1298

SECTION I: The following conditions shall apply to all sections of this permit unless otherwise noted. Conditions 2-15.

- 2. The permittee has elected to opt-out of being issued a major source operating permit pursuant to Rule 1200-3-9-.02(11)(a) of the Tennessee Air Pollution Control Regulations (TAPCR). The permittee would be considered a major source because their "potential to emit" for Carbon Monoxide and Nitrogen Oxides was greater than 100 tons per year each at the time of application. The permittee has agreed to be subject to limitations in order to be below the major source applicability thresholds for Carbon Monoxide and Nitrogen Oxides of 100 tons per year each.
- 3. Any non-compliance with any condition(s) of this permit set to restrain the "potential to emit" below the applicability thresholds of 1200-3-9-.02(11) of the Tennessee Air Pollution Control Regulations shall be reported in writing to the Technical Secretary within fifteen (15) working days of such discovery. This notification, at a minimum, shall include the identification of the source, identification of the permit condition(s) violated, and details of the violation.
- 4. The permittee is placed on notice that **Conditions 15, 16, 26, and 27** of this permit contain limitations that allow the permittee to opt-out of the major source operating permit program requirements specified in Division Rule 1200-3-9-.02(11). Failure to abide by these limits will not only subject the permittee to enforcement action by the State of Tennessee, but it may also result in the imposition of Federal enforcement action by the United States Environmental Protection Agency and the loss of being Federally recognized as a conditional major source.
- 5. Compliance with **Conditions 15, 16, 26, and 27** assures that this facility will be below the major source applicability thresholds for Carbon Monoxide and Nitrogen Oxides of 100 tons per year each.

This assurance is based on AP-42 Chapter 11, Section 1 (Hot Mix Asphalt Plants, dated December, 2000) and AP-42 Chapter 3, Section 4 (Large Stationary Diesel and All Stationary Dual-fuel Engines, dated October 1996) from which the emission factors were used to calculate emissions as shown below:

Carbon Monoxide	Based on use of No. 2 fuel oil as fuel for asphalt plant; Drum mix plant; Based on use of No. 2 fuel oil/diesel fuel as fuel for generator					
	AP-42 Table	Table I Emission Factor I		Emissions with limiting conditions, ton/yr		
58-0073-02	11.1-7	0.13 lb/ton	284.7	65.0		
58-0073-03	3.4-1	0.85 lb/MMBtu	31.3	7.1		
CO Total			316.0	72.1		

Nitrogen Oxides	Based on use of No. 2 fuel oil as fuel for asphalt plant; Drum mix plant; Based on use of No. 2 fuel oil/diesel fuel as fuel for generator					
	AP-42 Table	Emission Factor Emissions without limiting conditions, ton/yr		Emissions with limiting conditions, ton/yr		
58-0073-02	11.1-7	0.055 lb/ton	120.5	27.5		
58-0073-03	3.4-1	3.2 lb/MMBtu	117.7	26.9		
NOx Total			238.2	54.4		

6. A written report stating the compliance status of this facility with **Conditions 15**, **16**, **26**, **and 27** shall be submitted by March 31 of every year, beginning in the year 2005. This report shall include the records required by **Condition 24 and 35**. This report shall cover the preceding calendar year and shall be submitted to the Environmental Assistance Center at the following address:

Air Pollution Control Field Office Manager Chattanooga Environmental Assistance Center Suite 550, 540 McCallie Avenue Chattanooga, TN 37402

7. Should proof of compliance for the pollutant(s) with emission limitations placed on this permit be required, the emissions measuring test method(s) and procedure(s) are the following:

Pollutant or Parameter	Testing Methodology
Sulfur Dioxide	EPA Method 6 as published in the current 40 CFR 60, Appendix A
Particulate Matter	EPA Method 5 as published in the current 40 CFR 60, Appendix A
Carbon Monoxide	EPA Method 10 as published in the current 40 CFR 60, Appendix A
Nitrogen Oxides	EPA Method 7 as published in the current 40 CFR 60, Appendix A
Volatile Organic Compounds	EPA Method 25A as published in the current 40 CFR 60, Appendix A

- 8. Visible emissions from roads and parking areas shall not exhibit greater than 10 percent opacity utilizing Tennessee Visible Emissions Evaluation (TVEE) Method 1. This condition is established pursuant to Rule 1200-3-8-.01(1) of the Tennessee Air Pollution Control Regulations.
- 9. Fugitive emissions from this source shall be controlled as specified in Rule 1200-3-8-.01. Specifically, no person shall cause, suffer, allow, or permit fugitive dust to be emitted in such manner to exceed five (5) minutes per hour or twenty (20) minutes per day as to produce a visible emission beyond the property line of the property on which the emission originates, excluding malfunction of equipment as provided in Chapter 1200-3-20. Fugitive emissions from this source shall be determined by Tennessee Visible Emissions Evaluation Method 4. This condition is established pursuant to Rule 1200-3-8-.01(2) of the Tennessee Air Pollution Control Regulations.
- 10. Routine maintenance, as required to maintain specified emission limits, shall be performed on the air pollution control devices. Maintenance records shall be recorded in a suitable permanent form and kept available for inspection by the Division. These records must be retained at the source location for a period of not less than five (5) years.
- 11. The source(s) controlled by the air pollution control device(s) shall not operate unless the control device(s) is in operation. In the event a malfunction/failure of a control device(s) occurs, the operation of the process(es) controlled by the control device(s) shall be regulated by the provisions of Chapter 1200-3-20 of the Tennessee Air Pollution Control Regulations.
- 12. This permit is valid only at this location.
- 13. The issuance of this permit supersedes any permit(s) previously issued for this air contaminant source.
- 14. The permittee shall apply for renewal of this permit not less than 60 days prior to the permit's expiration date pursuant to Division Rule 1200-3-9-.02(3).

SECTION II: SOURCE SPECIFIC CONDITIONS

58-0073-02: 500 ton/hr Drum Mix Asphalt Plant with Baghouse Control. NSPS. Conditions 16-24 apply to Source 58-0073-02.

- 15. Only No. 2 fuel oil shall be used as a fuel for this source.
- 16. Production rate for this source shall not exceed 500 tons per hour on a monthly average basis and 1,000,000 tons during all intervals of twelve (12) consecutive months. Compliance with this requirement shall be indicated by the records required by Condition 24.
- 17. Particulate Matter (TSP) emitted from this source shall not exceed 0.04 grain per dry standard cubic foot of stack gases (11.5 pounds per hour). TAPCR 1200-3-16-.08(3)(a).
- 18. Sulfur Dioxide (SO $_2$) emitted from this source shall not exceed 5.5 pounds per hour. TAPCR 1200-3-14-.03(5).
- 19. Carbon Monoxide (CO) emitted from this source shall not exceed 65.0 pounds per hour. TAPCR 1200-3-7-.07(2).
- 20. Volatile Organic Compounds (VOC) emitted from this source shall not exceed 16.0 pounds per hour. TAPCR 1200-3-7-.07(2).
- 21. Nitrogen Oxides (NOx) emitted from this source shall not exceed 27.5 pounds per hour. TAPCR 1200-3-7-.07(2).
- 22. Compliance with the emission limit in Conditions 18 and 20 is based on compliance with Conditions 15 and 16 of this permit and AP-42, Chapter 11, Section 1, emission factors.
- 23. Visible emissions from this source not covered by **Conditions 8 and 9** shall not exhibit twenty (20) percent opacity, or greater. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (6 minute average). TAPCR 1200-3-16-.08(3)(b).

24. The permittee shall maintain a record of the type of fuel used (No. 2 fuel oil), operating hours, and asphalt production at this source, in a form that readily provides the information required in the following tables. The permittee shall retain this record at the source location for a period of not less than five (5) years and keep this record available for inspection by the Technical Secretary or their representative.

MONTHLY LOG: Source 58-0073-02

Month:		Year:					
Date	Type of Fuel Used	Hours of Operation	Production (tons)	Date	Type of Fuel Used	Hours of Operation	Production (tons)
1				17			
2				18			
3				19			
4				20			
5		T		21			
6			עוו	22			
7				23			
8				24			
9				25			
10				26			
11				27			
12				28			
13				29			
14				30			
15				31		·	
16							
				Total			

YEARLY LOG: Source 58-0073-02

Year:					
Month	Production (tons)	Hours of Operation Monthly Average Production Rate (ton/hr)		Production (tons/12 consecutive months)	
January					
February					
March					
April					
May					
June					
July					
August					
September					
October					
November					
December					

The Tons per 12 consecutive month value is the sum of the Production (in tons) in the 11 months preceding the month just completed + the Production (in tons) in the month just completed. If data is not available for the 11 months preceding the initial use of this table, this value will be equal to the value for "Production".

58-0073-03: One (1195 hp) Internal Combustion Diesel Generator. Conditions 25-34 apply to Source 58-0073-03.

25. The maximum total heat input capacity for this source shall not exceed 8,400,000 British Thermal Units per hour (8.4 MMBtu/hr).

- 26. The maximum fuel usage for this source shall not exceed 90,000 gallons during all intervals of twelve (12) consecutive months. Compliance with this requirement shall be indicated by the records required by **Condition 35**.
- 27. Only No. 2 fuel oil and diesel fuel shall be used as fuels for this source.
- 28. Particulate Matter (TSP) emitted from this source shall not exceed 0.60 pound per million British Thermal Units (lb/MMBtu) of heat input (5.0 lb/hr). TAPCR 1200-3-6-.02(2)(a)
- 29. Sulfur Dioxide (SO_2) emitted from this source shall not exceed 4.2 pounds per hour. TAPCR 1200-3-14-.03(5).
- 30. Carbon Monoxide (CO) emitted from this source shall not exceed 7.1 pounds per hour. TAPCR 1200-3-7-.07(2).
- 31. Volatile Organic Compounds (VOCs) emitted from this source shall not exceed 0.8 pound per hour. TAPCR 1200-3-7-.07(2).
- 32. Nitrogen Oxides (NO $_{\rm x}$) emitted from this source shall not exceed 26.9 pounds per hour. TAPCR 1200-3-7-.07(2).
- 33. Compliance with the emission limits in **Conditions 29 and 31** is based on compliance with **Conditions 26 and 27** of this permit and AP-42, Chapter 3, Section 4, emission factors.
- 34. Visible emissions from this source not covered by **Conditions 8 and 9** shall not exceed twenty (20) percent opacity except for one six minute period per one (1) hour or more than twenty-four (24) minutes in any twenty-four (24) hour period. Visible emissions from this source shall be determined by EPA Method 9, as published in the current 40 CFR 60, Appendix A (6 minute average). TAPCR 1200-3-5-.03(6) and TAPCR 1200-3-5-.01(1)
- 35. The permittee shall maintain a record of the monthly fuel usage and type of fuel used (No. 2 Fuel Oil, Diesel Fuel) at this source, in a form that readily provides the information required in the following table and shows compliance with **Conditions 26 and 27**. The permittee shall retain this record at the source location for a period of not less than five (5) years and keep this record available for inspection by the Technical Secretary or their representative.

MONTHLY/YEARLY LOG: Source 58-0073-03

Year:							
Month	Type of Fuel Used	Fuel Usage (gallons)	Fuel Usage (gallons/12 consecutive months)	Month	Type of Fuel Used	Fuel Usage (gallons)	Fuel Usage (gallons/12 consecutive months)
January				July			
February				August			
March				September			
April				October			
May				November			
June				December			

The Gallons per 12 consecutive month value is the sum of the Fuel Usage (in gallons) in the 11 months preceding the month just completed + the Fuel Usage (in gallons) in the month just completed. If data is not available for the 11 months preceding the initial use of this table, this value will be equal to the value for "Fuel Usage".